

WHAT IS CLAIMED IS:

1. A method of providing information on a client, the method comprising:
receiving on the client a client application, the client application requiring a plurality of
resources to execute;
determining by the client a subset of the resources that the client application requires;
retrieving the subset of the resources; and
performing the client application with the subset of resources to provide information.
2. The method of claim 1 wherein the resources include assets, asset bags, scenes, audio
files, or graphics files.
3. The method of claim 1 wherein the client application is an interactive application.
4. The method of claim 1 wherein retrieving includes retrieving the subset of assets from a
peer client.
5. The method of claim 1 wherein retrieving includes retrieving the subset of assets from an
application server.

6. The method of claim 1 wherein retrieving includes the steps of:
requesting the subset of resources from one or more peer clients;
determining a second subset of resources as the subset of resources that were not received from the one or more peer clients; and

requesting the second subset of resources from the application server.
7. A method of providing an interactive application on a client, the method comprising:
receiving from an application server a client application and a scene, the scene defining the interaction between one or more objects and the client application being configured to interpret and execute the scene;

determining a subset of the resources that the client application requires to perform the scene;

using the subset of resources on the client if the subset is available on the client;

loading the subset of resources from a second client if the subset is available on the second client; and

loading the subset of resources from the application server to the client if the subset is not available on the client or the second client.
8. The method of claim 7 wherein the client application is an interactive application.
9. The method of claim 7 wherein determining is performed by traversing an activity graph.
10. The method of claim 7 wherein the resources include assets, asset bags, scenes, graphics files, or audio files.

11. A method of distributing information from a server to a first client and a second client, the method comprising:
 - loading the information on a first client; and
 - distributing the information from the first client to a second client.
12. The method of claim 11 wherein the information includes an interactive software program.
13. The method of claim 12 further comprising the steps of:
 - determining the information that the interactive software program requires; and
 - retrieving the information that the interactive software program requires on an as needed basis.
14. The method of claim 13 wherein the information includes assets, asset bags, or scenes.
15. A method of performing a client application on a client, the method comprising:
 - defining a list of activities that the client application may be required to perform after a current activity, the list of activities requiring one or more resources;
 - determining whether the client has the resources available; and
 - fetching the resources if the client does not have the resources available.
16. The method of claim 15 wherein the resources include assets, asset bags, or scenes.
17. The method of claim 15 wherein the step of fetching is performed by requesting the resources from an application server.

18. The method of claim 15 wherein the step of fetching is performed by requesting the resources from one or more peer clients.
19. The methods of claim 15 wherein the client application is an interactive application.
20. A method of maintaining a knowledge base in a network environment, the method comprising:
- maintaining a portion of a knowledge base on a client;
 - determining whether the client can access the knowledge base on an application server;
 - and
 - updating the knowledge base on the application server when the application server is available.
21. The method of claim 20 wherein the knowledge base includes user information and status.
22. A method of providing an application, the method comprising:
- downloading on a client a client application;
 - maintaining on a server a knowledge base, the knowledge base storing user-specific information;
 - downloading a portion of the knowledge base to the client; and
 - receiving updates to the knowledge base from the client.
23. The method of claim 22 wherein the knowledge base includes user-specific information.

24. The method of claim 22 wherein downloading the knowledge base includes downloading only a portion of the knowledge base corresponding to a user.

25. A computer program product for providing information, the computer program product having a medium with a computer program embodied thereon, the computer program comprising:

computer program code for receiving a client application, the client application requiring a plurality of resources to execute;

computer program code for determining a subset of the resources that the client application requires;

computer program code for retrieving the subset of the resources; and

computer program code for performing the client application with the subset of resources to provide information.

26. The computer program product of claim 25 wherein the resources include assets, asset bags, scenes, audio files, or graphics files.

27. The computer program product of claim 25 wherein the client application is an interactive application.

28. The computer program product of claim 25 wherein the computer program code for retrieving includes computer program code for retrieving the subset of assets from a peer client.

29. The computer program product of claim 25 wherein the computer program code retrieving includes computer program code for retrieving the subset of assets from an application server.

30. The computer program product of claim 25 wherein the computer program code for retrieving includes:

computer program code for requesting the subset of resources from one or more peer clients;

computer program code for determining a second subset of resources as the subset of resources that were not received from the one or more peer clients; and

computer program code for requesting the second subset of resources from the application server.

31. A computer program product for providing an interactive application on a client, the computer program product having a medium with a computer program embodied thereon, the computer program comprising:

computer program code for receiving from an application server a client application and a scene, the scene defining the interaction between one or more objects and the client application being configured to interpret and execute the scene;

computer program code for determining a subset of the resources that the client application requires to perform the scene;

computer program code for using the subset of resources on the client if the subset is available on the client;

computer program code for loading the subset of resources from a second client if the subset is available on the second client; and

computer program code for loading the subset of resources from the application server to the client if the subset is not available on the client or the second client.

32. The computer program product of claim 31 wherein the client application is an interactive application.

33. The computer program product of claim 31 wherein computer program code for determining is performed by traversing an activity graph.

34. The computer program product of claim 31 wherein the resources include assets, asset bags, scenes, graphics files, or audio files.

35. A computer program product for distributing information from a server to a first client and a second client, the computer program product having a medium with a computer program embodied thereon, the computer program comprising:

computer program code for loading the information on a first client; and

computer program code for distributing the information from the first client to a second client.

36. The computer program product of claim 35 wherein the information includes an interactive software program.

37. The computer program product of claim 36 further comprising:

computer program code for determining the information that the interactive software program requires; and

computer program code for retrieving the information that the interactive software program requires on an as needed basis.

38. The computer program product of claim 37 wherein the information includes assets, asset bags, or scenes.

39. A computer program product for performing a client application on a client, the computer program product having a medium with a computer program embodied thereon, the computer program comprising:

computer program code for defining a list of activities that the client application may be required to perform after a current activity, the list of activities requiring one or more resources;

computer program code for determining whether the client has the resources available;
and

computer program code for fetching the resources if the client does not have the resources available.

40. The computer program product of claim 39 wherein the resources include assets, asset bags, or scenes.

41. The computer program product of claim 39 wherein the computer program code for fetching is performed by requesting the resources from an application server.

42. The computer program product of claim 39 wherein computer program code for fetching is performed by requesting the resources from one or more peer clients.

43. The computer program product of claim 39 wherein the client application is an interactive application.

44. A computer program product for maintaining a knowledge base in a network environment, the computer program product having a medium with a computer program embodied thereon, the computer program comprising:

computer program code for maintaining a portion of a knowledge base on a client;

computer program code for determining whether the client can access the knowledge base on an application server; and

computer program code for updating the knowledge base on the application server when the application server is available.

45. The computer program product of claim 44 wherein the knowledge base includes user information and status.

46. A computer program product for providing an application, the computer program product having a medium with a computer program embodied thereon, the computer program comprising

computer program code for downloading on a client a client application;

computer program code for maintaining on a server a knowledge base, the knowledge base storing user-specific information;

computer program code for downloading a portion of the knowledge base to the client;

and

computer program code for receiving updates to the knowledge base from the client.

47. The computer program product of claim 46 wherein the knowledge base includes user-specific information.

48. The computer program product of claim 46 wherein computer program code for downloading the knowledge base includes computer program code for downloading only a portion of the knowledge base corresponding to a user.